

### **REMARKS**

The Specification has been amended to recite certain elements shown in the drawings. Claims 20, 21 and 23 are amended herein. No new matter is added by virtue of the within amendments; support therefore can be found throughout the specification and original claims of the application.

As an initial matter, the Office Action objects to the drawings. Corrected drawings and/or further amendments will follow without delay under separate cover in order to fully address the noted objection.

The Specification is objected to for allegedly failing to define the elements "5" and "Wm" shown in the figures. It is respectfully submitted that these elements are intended to refer to the swirled gas currents which emerge from the gas-inlet pipes and their respective velocity profiles. As described below, Figure 2 shows the gas-swirling means of the gas-inlet pipe of the present invention which leads to swirled gas currents which emerge from the gas-inlet pipes with a velocity profile that is approximately constant over the cross-section of the gas-inlet pipe. In contrast, Figure 1 shows a substantially parabolic velocity profile of the gas current which is established over the cross-sectional area of the pipe in the case of the prior art gas-inlet pipes which do not have gas-swirling means. The Specification has been amended to recite the elements "5" and "Wm" where appropriate. Reconsideration and withdrawal of the objection are requested.

Claims 20, 21 and 23 are objected to for certain informalities. Appropriate correction has been made in each instance, thus withdrawal of the objection is requested.

Claims 15-20 and 22 are rejected under 35 USC §102(b) over Bagley et al. (US 4,329,526).

The rejection is traversed. The reference does not teach or suggest the features of the present invention in any manner sufficient to sustain the rejection. In that regard,

Applicant offers the following remarks in an effort to facilitate a precise understanding of the teachings of Bagley et al.

Bagley et al. describes a device for introducing gas into a fluidized bed comprising a gas-inlet pipe having **gas-distributing means**, but not a device comprising a gas-inlet pipe having **gas-swirling means**, which feature constitutes a most critical feature of the present invention.

As described in the present application (cf. page 3, line 6 to 37 of the specification originally filed, or paragraphs [0009] to [0012] on page 1 of U.S. 2005/0250967 A1), the inventive device is characterized in that the gas-inlet pipe(s) effect(s) swirling of the transported gas current, which results in a modification of the velocity profile of the volumetric flow and thus prevents a deterioration and/or loss of the fluidized bed particles. This advantageous effect caused by the gas-swirling means at the mouth of the gas-inlet pipes according to the present invention may be visualized by means of the velocity profile of the volumetric flow (as depicted by the numeral (5) in Figures 1 and 2). The gas-swirling means of the gas-inlet pipe of the present invention leads to swirled gas currents which emerge from the gas-inlet pipes with a velocity profile that is approximately constant over the cross-section of the gas-inlet pipe (cf. Figure 2). In contrast thereto, a substantially parabolic velocity profile of the gas current is established over the cross-section area of the pipe in the case of prior art gas-inlet pipes which do not have gas-swirling means (cf. Figure 1).

The gas distribution means described by Bagley et al. does not comprise any gas-inlet pipes having gas-swirling means at all. Therefore, one skilled in the art would expect that the inlet-pipes of Bagley et al. will show a parabolic velocity profile as is typical of the prior art. Moreover, Bagley et al. emphasize that all parts of the gas-distribution system should be generally circular and unobstructed (cf. for example, abstract, or claim 1, (a) and (c) of Bagley et al.). Such means will not influence the gas-current which thus will emerge from the inlet pipes as a linear current and not as a swirled current. This may also be the reason for the linear gas-velocity used in the example of Bagley et al. (cf. U.S.

4,329,526, column 5, lines 33 to 34: 0.53 to 0.58 foot per second) being much slower than the gas-velocity of more than 1 m/s used in the example of the present invention.

To anticipate a claim, each and every element of the claim must be found in a single reference. This is discussed in the Manual of Patent Examining Procedure at § 2131:

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. In *re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Bagley et al. do not teach or suggest the features of the present invention as required to sustain the rejection. Reconsideration and withdrawal of the §102 rejection are requested.

Claims 23-27 stand rejected under 35 USC §103(a) over Bagley et al. in view of Cowfer et al. (US 6,177,599).

The rejection is traversed. The cited documents, even in combination, do not teach or suggest the features of the present invention in any manner sufficient to sustain the rejection.

The deficiencies of Bagley et al. are described above. Applicant submits that Cowfer et al. cannot remedy such deficiencies. Thus, the two documents, even in combination, do not teach or suggest a device comprising a gas-inlet pipe with gas-swirling

means at its mouth. Moreover, the advantageous effects associated with the present invention further rebut any *prima facie* case of obviousness which may be contended.

Reconsideration and withdrawal of the §103 rejection are requested. See Section 2143.03 of the Manual of Patent Examining Procedure ("To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.").

**REQUEST FOR EXTENSION OF TIME AND FEE AUTHORIZATION**

Applicant hereby requests a two-month extension of time for filing the within response. Please charge all fees associated with the extension and any other required fee (or credit any overpayment) to Deposit Account No. 04-1105, Reference No. 62571(52059).

Dated: April 14, 2008

Respectfully submitted,

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